REVISITING TRADITIONAL EDUCATIONAL PRACTICES IN THE AGE OF DIGITALIZATION

REVISITANDO AS PRÁTICAS EDUCATIVAS TRADICIONAIS NA ERA DA DIGITALIZAÇÃO

REVISIÓN DE LAS PRÁCTICAS EDUCATIVAS TRADICIONALES EN LA ERA DE LA DIGITALIZACIÓN

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ABSTRACT: During the period of lockdown both students and teachers experienced immersion in the digital environment to the full, what allowed actualizing the so-called "dark" sides of organization of the educational process; those metamorphoses, which traditional roles of a student and a teacher are currently getting exposed to. Post-pandemic realities of education within the contour of Timothy Morton's dark ecology theory are considered in the present paper. The authors make use of a "hyperobject" concept while studying the introduction of digitalization in the field of education, submitting to extrapolate Morton's optics to comprehension of educational practices, mediated by digital environment. It is shown in the study, that absorption of traditional educational practices proves to be a limited discourse, where the technological component of digitalization is being merely actualized and the essence of educational process is being simultaneously discredited.

KEYWORDS: Pedagogy. COVID-19. Digitalization of education. Critical thinking. Modern education.

RESUMO: *Durante o período de bloqueio tanto estudantes como professores experimentaram a imersão total no ambiente digital, o que permitiu atualizar os chamados lados "escuros" da organização do processo educativo; essas metamorfoses, às quais os papéis tradicionais de um estudante e de um professor estão expostos atualmente. As realidades pós-pandêmicas da educação dentro do contorno da teoria ecológica obscura de Timothy Morton são consideradas no presente artigo. Os autores fazem uso de um conceito de "hiperobjeto" enquanto estudam a introdução da digitalização no campo da educação, submetendo-se a extrapolar a ótica de Morton para a compreensão das práticas educativas, mediadas pelo ambiente digital. O estudo demonstra que a absorção das práticas educativas tradicionais se revela um discurso limitado, onde a componente tecnológica da digitalização está a ser meramente atualizada e a essência do processo educativo é, simultaneamente, desacreditada.*

PALAVRAS-CHAVE: *Pedagogia. COVID-19. Digitalização da educação. Pensamento crítico. Educação moderna.*

RESUMEN: *Durante el período de confinamiento, tanto estudiantes como docentes experimentaron una inmersión total en el entorno digital, lo que permitió actualizar los llamados lados "oscuros" de la organización del proceso educativo; esas metamorfosis, a las que actualmente se exponen los roles tradicionales de un estudiante y un maestro. En el presente documento se consideran las realidades de la educación posteriores a la pandemia dentro del contorno de la teoría de la ecología oscura de Timothy Morton. Los autores hacen uso de un concepto de "hiperobjeto" al estudiar la introducción de la digitalización en el campo de la educación, sometiéndose a extrapolar la óptica de Morton a la comprensión de las prácticas educativas, mediadas por el entorno digital. Se muestra en el estudio, que la absorción de prácticas educativas tradicionales resulta ser un discurso limitado, donde el componente tecnológico de la digitalización está siendo meramente actualizado y la esencia del proceso educativo está siendo simultáneamente desacreditada.*

PALABRAS CLAVE: *Pedagogía. COVID-19. Digitalización de la educación. Pensamiento crítico. Educación moderna.*

Introduction

The past decades are associated with active introduction of digital technologies into different spheres of human interaction. Parallel to this process, the replication of personal sensations is taking place: one may watch, read, or listen to hundreds of podcasts, blogs, video broadcasts and single out the common patterns, "random" users of digital media have gone through.

Thereby crystallizes a set of certain invariant trails in each of thematic gaps, represented in digital media space.

What is reproduction of repetitive behavioral patterns predetermined by? Is that a necessity and a desire of joining a position of conditional universality or a manifestation of epistemological relativism? Attempting to answer these questions, we offer choosing a sphere of education (either secondary or higher) which a common trend of focusing the students on independence of their informational-explorative research is inherent to. At the same time, noticing the positive aspects of developing students' independence, we cannot but ask the question of whether the promotion of individual cognitive autonomy in cognition affects the development of a critically-thinking subject?

For instance, preparation for passing the Unified State Examination (USE) implies forming your own cognitive strategy. For this purpose, schoolchildren look for ready-made assignments, study with tutors online or in person, buy and watch recorded webinars. At first glance, such practice demonstrates autonomous navigation, thanks to which the skills of independent search activity develop. However, in our opinion, such activity happens in an overly narrow, particular discourse, aimed at mastering a certain algorithm, which ensures a successful passing of USE. Thereby the essence of the whole educational path of a student, his formation as critically thinking subject, except for subject-specific knowledge, is leveled out. It is noteworthy that critical thinking necessarily implies an ability of questioning one's ideas and actions and reflect upon the ethic character of decisions being made. As a result, we come across a range of questions, the answers to which a choice of a particular strategy depends upon. What are the attributes of critical thinking and in what way can digital instruments contribute to their development? What is the meaning of a given mark for a student and in what way can it influence his future choice of a cognitive position?

Teaching is simultaneously undergoing substantial transformations. The teacher has new functions, mediated by digitalization processes and at the same time the share of his presence in educational process goes down. Apart from that, present-day universities as well as teachers,

being its basic structural units, are forced to experience competition from actively developing alternative ways and programs of studying. As a bright example one may draw BootCamps – short-term intensive educational programs with full immersion, which take students away from traditional educational establishments since they create an environment for learning fast, often at lower costs. According to Technavio, the world market of educational courses on coding has grown by 14% in 2021, with 41% of the projected growth between 2021 and 2025 falls on North America (TECHNAVIO, 2022).

Methods

For this study, authors have conducted a comprehensive literature search using relevant academic databases such as Web of Science and Scopus. The search included keywords related to dark ecology, education, object-oriented ontology, digitalization, educational programs with full immersion, cognition and etc. These databases were chosen for their comprehensive coverage of articles, books, and other relevant sources in the fields of education, digitalization, and philosophy.

The material retrieved from the databases was evaluated based on its relevance to the research objectives and its contribution to the understanding of post-pandemic education and the integration of digitalization. The evaluation process involved carefully reading and analyzing each source to assess its quality, depth of analysis, and alignment with the study's theoretical framework.

In the context of this study, it is important to highlight the foundational work of English philosopher Timothy Morton, who is credited with introducing the concept of dark ecology. Morton's philosophy develops within the confines of object-oriented ontology:

> There is no such a thing, like a space, independent from objects…What is called the Universe is a large object, containing such objects, as black holes and pigeon racing. Likewise, there is no such thing as an environment: wherever we look for it, we find omnifarious objects – biomes, ecosystems, hedges, sewers and human flesh. In a similar sense, there is no such thing as Nature. I saw penguins, plutonium, pollution and pollen. But I have never seen Nature (I use this word with a capital letter to emphasize its deceptive artificiality) (MORTON, 2013a, p. 53).

For Morton, nature exists regardless of our actions. At the same time, visible nature is by no means the whole of nature: much remains invisible and unforeseen. For instance, we cannot perceive global warming, radiation, black holes and pandemics in our direct experience.

All of this is of an abstract character for a person and resides in a "dark" zone. For indicating invisible nature Morton introduces the notion "hyperobject". In the work "Hyperobjects. Philosophy and Ecology after the End of the World" (MORTON, 2013b) philosopher submits a concept of denying a standard way of thinking of "hyperobjects", hence traditional ethical and political methods of fighting for the environment have reached a dead end today. As it turned out to be, humanity and environment have a distorted form of interactions. As a result, the surrounding world, according to Morton, becomes a space of existential horror for a person.

By drawing on Morton's concepts and theories, this study seeks to extend his perspective to the realm of education and the impact of digitalization. The integration of Morton's dark ecology theory and the analysis of digitalization in education aim to shed light on the transformations experienced in the post-pandemic educational landscape and the implications for students, teachers, and educational institutions.

Results and Discussion

Dark issues

Within Morton's logic, traditional discourse of education, implying its consideration as a process, which is influenced by teachers and parents, and which effectiveness is measured by practices, allowing increasing or decreasing certain indicators, is unproductive.

This discourse looks like a limited cut of contact with reality, demonstrating absorption of educational practices by digital environment. The logic of "transfer" continues to be reproduced within its framework, therefore, a teacher, demonstrating a card with an image for clarity and illustrating this image on the screen of a smart device, is practically, one and the same thing. At the same time, even making use of all the tools available to the user today, for example, in the process of creating a 3D animated film for a lesson, a teacher is not capable of complying with the logic of the digitalization process, which is carried out regardless of his actions, just as with Morton, nature exists regardless of what the person undertakes.

Representatives of the sphere of education, undergoing the digitalization process, first came across it as a hyperobject during pandemic. Undoubtedly, up until 2020 digitalization of education was being articulated as a problem in rational pedagogic discourse, however, the position of control over this process proved to be an illusion.

The use of multimedia equipment, conversion of educational materials and yearbooks into digital form, etc. – are only extrinsic manifestations of digitalization that fail revealing its

essential dimension. As a result, digital environment appears as a space of horror, total uncertainty, unpredictability and hyperobjectivity of digital architecture is predominantly aimed at absorption and transformation of human thinking human ability to act. The forced transition to the format of distance teaching showed that without a number of components of traditional education, the entire pedagogical practice, mediated by the "digit", is untenable.

Pandemic made pedagogic crisis conspicuous, when teachers have necessarily started rethinking one's professional role, targets of learning and methods of their attainment.

Paradigm of classic approach, which may possibly be indicated as a "God point", when a teacher practices a "top-down" teaching method and his authority relies on a presumption of a single source of information, while students are considered as passive "empty vessels" which have to be forced to active interaction and filled in with ready-made informational formulae, proves to be dysfunctional. Nowadays students prefer carrying out a search of information themselves, what actualizes the need of teaching the skills of verifying online-sources and creating responsibility for one's learning.

Recognition of the change in the influence of teachers upon epistemological strategy of students is simultaneously recognition of the transformation of the teacher's role into an increasingly auxiliary one.

During the pandemic teaching staff of universities had to move educational materials, texts of assignments to the Internet, what literally lead to a new lap of technical reproductivity, when students got the opportunity of taking screenshots, notes, exchanging materials and replicating them among those, who do not have them. Such practice of "replacing" teacher's personality with ready-made educational content is accompanied by a sharp decline in the share of implicit knowledge, which is exclusively transmitted through live teacher-student interactions; and respectively, by a growth in the share of explicit (objectified) knowledge.

Digitalization adumbrates the improvement of educational experience for users, whereas for educators it means mastering a wide scope of digital educational instruments, more time-consuming course maintenance, answering asynchronous students' questions, editing presentations, repurposing lectures for online conference format, recording video lectures.

This entails an increase in the specific work load, which does not allow educators paying enough attention to an in-depth revision of the course content. At the same time, there is an increase in educators' anxiety, associated with a growing use of artificial intelligence (AI) in order to automate the assessment system and generate reports on students' strengths and weaknesses.

Digitalization of education has clarified the opportunity of optimizing test monitoring and even holding exams, which makes it possible to make some faculty members redundant and, consequently, to lower the cost of educational process.

Thus, in mass open courses AI is used for facilitating the work of teaching assistants: for instance, virtual assistant JillWatson is used for answering repetitive questions (AUDRAS *et al.*, 2022).

Digital Transformation

Pandemic served as a catalyst of those tendencies, which have been frequently predicted in different futuristic papers (KARPOV, 2018; NIKOLAEVA; SHCHELKUNOV, 2015; PLOTNIKOVA; BORISOVA, 2017). The sudden catapult into the future, which has become commonplace since 2020, has significantly changed the scenario for the development of higher education. Since we are residing in a conditional post-pandemic position, it becomes possible to analyze those forecasts, that did not justify themselves as well as those transformations, that brought fundamentally new qualitative accents to the educational process and at the same time revealed its "dark" sides. The publication of K. Pelletier *et al.* (2022) provides a critical analysis of the main trends in the development of education. As a general trend, the authors outline the transition to a hybrid format and normalization of online learning, which allows students to get a more personalized approach, and also contributes to the collection of Big Data, which, in turn, allows improving proctoring and artificial intelligence tools. Educational establishments are taken up with the search of long-term instruments for raising effectiveness of online and hybrid methods of teaching as well as the ways of boosting students' interest in obtaining microcertificates and strategies, allowing reducing the need for a physical increase in the classroom fund.

However, in practice we come across contradictions, appearing within the process of implementing the transition to hybrid learning. If we consider the context of the pandemic, the motivation for the transition to the online format was exclusively humanistic – saving lives and health of people.

However, nowadays this motivation does not happen to be definitive, for such motives as economic feasibility and convenience come to the fore in digitalization processes. Technological component happens to be a dominant of digital transformations, determining their essence for the majority of participants of this process. HSE experts have formulated seven tasks for the digitalization of Russian education. They believe that "the essence of digital

transformation is to effectively and flexibly apply the latest technologies for moving towards a personalized and results-oriented educational process". At the same time, all seven tasks have technological content exclusively (PERVUKHIN; SEDOVA; KIRYANOVA, 2021).

It is worth noticing that such position proves to be particular in its nature, since those metamorphoses that the main participants in the educational process undergo, drop out of sight. Just as separate waste collection cannot solve environmental problems, equipping the educational process with digital technologies cannot lead to the instant emergence of a teacher and student of a new format.

The work of American researchers (JOOSTEN *et al*., 2021) focuses on four dialectics of blended learning, which, when superimposed on the reality of experiencing the pandemic, can be interpreted by us as follows:

1. Technological. On the one hand, blended learning format implies the multimedia nature of the resources used in the course; on the other hand, the variety of formats depends on the choice and capabilities of the teacher and often turns out to be introduced in the form of the only option, such as recorded videos (YouTube video hosting), online classes (for example, Zoom, Microsoft Teams), audio recordings, etc.

2. Temporal. The interaction between students and teachers can occur synchronously (in real time, students connect to the broadcast of the lesson) or asynchronously (each performs a task or studies materials independently, according to a flexible schedule).

3. Spatial. Revision of the paradigm of geographical reference is happening, and participation in the educational process exclusively in the form of personal presence loses the character of an imperative. The state of health, the need of complying with quarantine measures and self-isolation are compensated by the virtual presence in the classroom.

4. Pedagogical. This type of dialectic, according to American researchers, is of the greatest critical importance for learning. Thus, the course is determined primarily by pedagogy, and not by technology, so the format of blended learning or the global use of online technologies act as complementary solutions for the implementation of active learning practice. However, in order to optimize the educational process, the teacher is forced to reduce his own presence in the space of education and, as a result, experience the effect of alienation from personal professional everyday life.

Conclusion

Digitalization of education might be conceptualized as hyperobject, since the processes, which are currently unfolding in education and are commonly referred to as digitization, demonstrate disorientation of educators and students in comprehension of the essence and scale of this process and how to connect to it. Incomprehension of those deep effects, which digital dimension has upon all the participants of educational communication is observed. These effects are presently acting as "dark" sides of digital education and remain latent for rational reflection.

Participants of the educational process, covered by the active introduction of digital technologies, are not infrequently experiencing total disorientation and the loss of meaning which gives way to a "dark", "nocturnal" way of comprehending reality, having nothing to do with critical thinking, which, in turn, appears to be system-reflexive in itself. The problem of defining the ways to develop critical thinking in digital reality is becoming increasingly acute. Should we, following the idea of Socrates, who believed that a person is evil only because he does not know what good is, should we introduce students to logical reasoning or instead immerse them in problematic case studies? We are faced with the task of using pedagogical tools (including those based on digital technologies) to "move" the student from a position of ethical, logical ignorance to a point where he will be able to independently think about moral issues, distinguish between manipulations, and make optimal and responsible decisions. This, to our mind, is the most significant task that requires being solved; otherwise, we are at risk of obtaining digital education without education.

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